

Abstract

According to the present invention, there is provided
a solid-state laser diode comprising:

5 a laser diode for exciting a solid laser medium;
a constant current source for supplying a constant
current to the laser diode;

voltage measurement means for measuring a voltage at both
ends of the laser diode; and

10 abnormality detection means for detecting an abnormality
at the laser diode based on an output of the voltage measurement
means. Whereby a photodiode need not be arranged on the
periphery of the solid laser medium and the laser diode, and
an abnormality at the laser diode can be detected without
15 increasing the size of the device and complicating the device
and without deteriorating the laser emission efficiency.